

NPDES PERMIT FACT SHEET  
**PESTICIDE GENERAL PERMIT FOR POINT SOURCE DISCHARGES TO  
WATERS OF THE STATE FROM THE APPLICATION OF PESTICIDES**  
Draft Renewal of General Permit Number ING870000 (2016–2021)  
August 22, 2016

**GENERAL FACILITY INFORMATION**

IDEM proposes to renew its NPDES general permit (ING870000) that covers discharges to surface waters of the state of Indiana resulting from the application of pesticides as described below. The existing permit was issued and became effective on October 31, 2011 with an expiration date of October 30, 2016.

**Description of activities covered under this permit**

Pesticide discharges from the following applications of pesticides are covered under this general permit:

- (1) The application of pesticides directly to water in order to control pests. Examples of such applications include applications to control mosquito larvae, aquatic weeds, or other pests that are present in water.
- (2) The application of pesticides to control pests that are present over water, including near the water, where a portion of the pesticides will unavoidably be deposited to the water in order to target the pests effectively. Examples of such applications include when insecticides are aerially applied to a forest canopy where water may be present below the canopy, or when pesticides are applied over or near water for control of adult mosquitoes or other pests.

Specific pesticide uses that are covered under this general permit include:

- (1) Control of public health or nuisance pests and other flying insect pests that develop or are present during a portion of their life cycle in or above standing or flowing water. Public health or nuisance pests in this use category include but not limited to mosquitoes and black flies.
- (2) Control of invasive or other nuisance weeds and algae in water and at water's edge, including irrigation ditches and irrigation canals including but not limited to:
  - Treating weeds in a right-of-way or easement where to target the pests effectively a portion of the pesticide unavoidably will be applied over and deposited to water; and
  - Control of aquatic vegetation through chemical or biological means in waters of the state under a permit issued by the Department of Natural Resources under [IC 14-22-9-10](#) and [312 IAC 9-10-3](#).
- (3) Control of invasive or other nuisance animals in water and at the water's edge. Aquatic nuisance animals in this use category include, but are not limited to fish, lampreys, and mollusks.
- (4) Aerial or ground application of a pesticide over a forest canopy to control the population of a pest species, for example, an insect or pathogen, where to target the pests effectively a portion of the pesticide unavoidably will be applied over and deposited to water.

- (5) Application of pesticides to outstanding state resource waters designated in 327 IAC 2-1.3-3(d) to restore or maintain water quality or to protect public health or the environment where those discharges either do not degrade water quality or only degrade water quality on a short-term or temporary basis.

### **Description of activities that are not covered under this permit**

Pesticide uses that are not covered under this general permit include:

- (1) Agricultural pesticide applications to the land or to terrestrial crops.
- (2) Agricultural stormwater runoff.
- (3) Pesticide applications or discharges that violate [IC 15-16-4](#), [IC 15-16-5](#), the rules of the Office of the Indiana State Chemist (OISC) at [355 IAC 4](#) or [355 IAC 5](#), the rules of the Indiana Pesticide Review Board (IPRB) at [357 IAC 1](#), or the pesticide product label.
- (4) Pesticide applications that result in the discharge of any pesticide to waters that have been designated as impaired for that pesticide or its degradates or as outstanding state resource waters designated in 327 IAC 2-1.3-3(d) except as otherwise provided, that violates a water quality standard established in [327 IAC 2](#), or within a pesticide setback established by the OISC or the IPRB or described in the product label.
- (5) Discharges that are currently covered by another NPDES permit.
- (6) Discharges included in a permit that within the last five (5) years has been or is in the process of being denied, terminated, or revoked by the department.

### **Detailed description of the discharge location**

Pesticide discharge locations exist throughout Indiana and include the following:

- (1) Aquatic weed and vegetation control. Indiana has numerous water bodies and waterways that frequently require pesticide use to control nuisance or invasive vegetation to maintain water and habitat quality, navigation, resource use, etc. These areas exist throughout Indiana.
- (2) Aquatic invasive species. Indiana Department of Natural Resources, the U.S. Fish & Wildlife Service and others control a variety of aquatic invasive species. The range and extent of these activities are documented in the "[Indiana Aquatic Nuisance Species \(ANS\) Management Plan](#)."
- (3) Mosquito control activities. Mosquito control is carried out at locations throughout Indiana.
- (4) Gypsy moth and other nuisance insect control in forests. Gypsy moth control activities are currently being conducted in northern Indiana under [Indiana's Strategic Plan for Gypsy Moth Management](#).
- (5) Blue-green algae. Treatment of surface drinking water supplies for blue-green algae blooms by utilities or reservoir managers.

### **Type and quantity of wastes or pollutants discharged**

Pollutants covered under this permit are pesticides used for control of nuisance pests in or over the water in quantities authorized by the OISC. Pesticides applied include those approved by and registered with the OISC under IC 15-16-4-61 for control of aquatic and terrestrial pests. A person covered by this general permit may only utilize pesticides which are currently registered with the OISC for aquatic use in Indiana, and

during the course of this permit the list of registered pesticides may change. The quantities of these pesticides used for aquatic application has not been specifically analyzed. In addition, it is not known how much of each pesticide becomes waste after it is applied. Using current monitoring and data measurement techniques, it is not possible to meaningfully quantify the amount discharged as a pollutant at this time.

## **SUMMARY RATIONALE OF PERMIT CONDITIONS**

### **Division of authority under Indiana law**

Under current Indiana law, the Indiana Department of Environmental Management (IDEM) is responsible for implementation of the Clean Water Act, and the OISC is charged with regulation of pesticide use. [[IC 13-13-5-1\(1\)](#), [IC 15-16-4](#)] As a result of this divided jurisdiction, the permit contains those conditions that are relevant to the Clean Water Act (CWA), and does not intrude on the statutory jurisdiction of the OISC.

### **Indiana pesticide rules equivalent to federal standards**

The OISC has determined that Indiana law and the rules of the Indiana Pesticide Review Board and the OISC are equivalent to and as protective as the standards of the Environmental Protection Agency's final (2011) pesticide general permit (EPA PGP) pertaining to application of pesticides, and the draft (2016) renewal of the U.S. EPA pesticide general permit.

### **Definitions**

The definitions in the following apply throughout this document:

- IC 13-11-2
- IC 15-16-4
- IC 15-16-5
- 327 IAC 2-1-9
- 327 IAC 2-1.5-2
- 327 IAC 2-6.1-4
- 327 IAC 5-1.5
- 355 IAC 4-0.5
- 357 IAC 1
- 7 U.S.C. 136
- 33 U.S.C.1321
- 40 CFR 122
- 40 CFR 130.2
- 40 CFR 152.3
- 40 CFR 166.3
- 40 CFR 174.3
- The U.S. Environmental Protection Agency "NPDES Pesticide General Permit (PGP) for Point Source Discharges to Waters of the United States from the Application of Pesticides (Final)" issued in October 2011.

The term "Person" has the meaning set forth in IC 13-11-2-158:

(a) "Person", for purposes of:

- (1) IC 13-21;
- (2) air pollution control laws;
- (3) water pollution control laws; and
- (4) environmental management laws, except as provided in subsections (c), (d), (e), and (h);

means an individual, a partnership, a co-partnership, a firm, a company, a corporation, an association, a joint stock company, a trust, an estate, a municipal corporation, a city, a school city, a town, a school town, a school district, a school corporation, a county, any consolidated unit of government, political subdivision, state agency, a contractor, or any other legal entity.

### **Notices of intent**

This permit will require the largest pesticide applicators to submit a notice of intent, unless they have been issued a GN number by the OISC. A "GN number" is the OISC identifier number that is assigned to a "government or not-for-hire pesticide application operating location". These operators would potentially include the following if they exceed a use pattern threshold or have a discharge to an outstanding state resource water:

- (1) The Indiana Department of Natural Resources (IDNR) which conducts aquatic pesticide applications with its employees, contracts for pesticide application by registered applicators, and permits application of aquatic pesticides to Indiana water bodies and waterways under Indiana law. IDNR also contracts for and supervises aerial pesticide application to control gypsy moth and other invasive species.
- (2) The Indiana Department of Transportation that uses its employees and contractors to apply pesticides to ditches and ditch banks to maintain public right-of-ways.
- (3) The U.S. Forest Service when it performs or contracts for pesticide application to control pests in national forests.
- (4) Utilities, railroads and other entities that apply pesticides to right-of-ways to control invasive or nuisance vegetation if they (A) exceed a use pattern threshold and (B) are not a small business as defined in Indiana law ([IC 5-28-2-6](#)).

Under 40 CFR 122.28(b)(2)(v), the commissioner has determined that submission of a notice of intent under this permit by pesticide applicators other than the pesticide applicators described above is unnecessary, but is not prohibited. Most pesticide applications that would exceed a threshold in the permit are (1) conducted by the state of Indiana or a federal agency using its employees or contractors or by large companies such as utilities and railroads, (2) are permitted by the state, or (3) are carried out by persons registered or certified by the OISC. All of these pesticide applications are a matter of public record. All pesticide application in the State of Indiana is regulated by the OISC. As a result of this determination, submission of a notice of intent by every pesticide applicator will not be required under this general permit. Notice of intents are

only required of those persons who meet the criteria of Tables 1, 2 & 3 and who are not exempted by Table 4.

### **Pesticide Discharge Management Plans**

This permit will require only those persons who are required to submit a Notice of Intent to also develop a Pesticide Discharge Management Plan (PDMP). The form of the plan will be specified by the OISC since the PDMP consists of standards and procedures applicable to the planning and control of pesticide application and the OISC is the agency tasked by Indiana law with controlling the application of pesticides in Indiana. The Plan is not required to be submitted to IDEM or OISC for approval prior to its implementation. A copy of the PDMP shall be maintained by the person and shall be made available for agency (IDEM or OISC) review upon request.

### **Declared Pest Emergencies**

Persons applying pesticides in response to a declared pest emergency situation under 40 CFR 166 will be authorized to discharge immediately for activities conducted in response to that declared pest emergency situation.

## **DETAILED RATIONALE OF PERMIT CONDITIONS**

### **Permit conditions**

Permittees will be required to comply with the following to maintain coverage under this permit. The permit contains all provisions of the EPA PGP relating to CWA implementation, including notification of spills, leaks and other unpermitted discharges and adverse incident notification, termination, revocation, requirement to obtain an individual NPDES permit, and provisions for changes to the terms and conditions of the general permit.

### **Technology-based effluent limitations**

Permit conditions to comply with technology-based effluent limitations:

- (1) [IC 15-16-4](#) covers pesticide approvals, registration of pesticides, handling, storage and disposal of pesticides.
- (2) [IC 15-16-5](#) covers pesticide use and application, licensing, certification and registration of pesticide applicators, enforcement and violations.
- (3) [355 IAC 4](#) covers pesticide applicator certification and registration, supervision of applicators, site awareness and on-site supervision, liability coverage, record-keeping.
- (4) [355 IAC 5](#) covers storage and secondary containment of pesticides.
- (5) [357 IAC 1](#) covers violations and enforcement, use of pesticides in wellhead protection areas and near community public water supply system wells, community-wide mosquito abatement, pesticide drift, open burning of pesticide containers, use of pesticide service containers, use of pesticides at golf courses.
- (6) The pesticide product label required by Section 3 of the Federal Insecticide, Fungicide and Rodenticide Act (7 U.S.C. §136a).

## Water quality based effluent limitations

Permit conditions to comply with applicable numeric and narrative state water quality standards and water quality based effluent limitations:

- (1) [IC 14-22-9-10](#) and [312 IAC 9-10-3](#) cover aquatic pesticide applications under a permit issued by the Indiana Department of Natural Resources for control of aquatic vegetation.
- (2) [327 IAC 5-2-8](#) covers general standards and requirements for NPDES permits.
- (3) [327 IAC 2](#) covers numeric and narrative water quality standards in Indiana.

## Monitoring and reporting requirements

This permit requires permittees to report spills under existing Indiana rules at [327 IAC 2-6.1](#). This permit also requires permittees to reports spills in accordance with section 311 of the Clean Water Act (33 U.S.C. 1321). Since the spill reporting provisions are matters of longstanding law and rule, they are not further restated in this permit. This permit also requires permittees to monitor for, identify and report adverse incidents. The language for this requirement was drawn from the proposed EPA PGP. Permit conditions to comply with state and federal reporting requirements are:

- (1) [327 IAC 2-6.1](#) for reporting of spills.
- (2) 40 CFR 110.6 and 40 CFR 117.21 for reporting of spills to the National Response Center.
- (3) [IC 13-14-2-2](#) and [327 IAC 5-1-3\(c\)](#) for inspection and entry.
- (4) Section 311(b)(5) of the Federal Water Pollution Control Act (33 U.S.C. 1321(b)(5)).

## Record-keeping

Record-keeping requirements are found at [IC 15-16-5-59](#) and [355 IAC 4-4](#). The Office of the Indiana State Chemist (OISC) requires record-keeping for applicators of Restricted Use Products. Records are required for applications to schools, golf courses, and any termiticide applications.

### 1. Public health, nuisance & flying insect pests, life cycle – water

OISC has been in touch with the largest organized mosquito control programs in the state. They track and record their own pesticide use information (for both restricted use and general use pesticides), summarize it, and then include it as part of their annual report that they prepare for purposes other than NPDES permit compliance. They routinely supply OISC with copies of their annual report as an FYI. Smaller mosquito control programs keep pesticide use records for their own liability purposes. Keeping track of annual pesticide use for a smaller program is obviously much easier than it would be for a large program. Their pesticide use choices are usually more limited and the water bodies (and watersheds) near which they operate are much easier to identify. In addition, OISC has never conducted a mosquito pesticide application investigation for which the applicator (county, city or town) has not been able to provide use information to us. Bottom line, they all keep use records whether required or not.

## 2. Invasive or nuisance weeds, algae in water, water's edge

IDNR permits require record keeping of all pesticide products applied to water to control aquatic weeds.

Under FIFRA U.S. EPA performs a risk assessment when making a registration decision about the approved use of a pesticide. They also factor in whether a pesticide can be used without unreasonable adverse effects when determining whether certain uses should be classified as Restricted Use Pesticides. Unreasonable adverse effects to water are definitely one of the criteria used in determining RUP classification. For example, if a product like atrazine is a threat to water, then it gets classified as an RUP. As a result of EPA's diligence during the pesticide registration and re-registration processes, a requirement to keep application records is created with the RUP classification. In spite of this automatic record keeping requirement for pesticides that may be problematic when used around water, most aquatic pesticide applications are made by certified and licensed individuals who keep records for all pesticide applications. OISC has not conducted a pesticide use/misuse investigation for aquatic applications within the last 15 years for which the applicator has not been able to provide application records. They keep the records for personal liability purposes.

## 3. Invasive or nuisance animals in water, waters' edge DNR & FWS control of invasive animals

OISC has contacted IDNR-FWS to ensure that all of their applications for nuisance/invasive animals are performed by certified and licensed IDNR staff or certified and licensed contractors. The IDNR will do a risk assessment before determining to apply the pesticide. Many of the pesticides they use are Restricted Use Pesticides so records are mandated. Even for the general use pesticides the risk assessment will then dictate the pesticide choice, rates, locations, and timing. As a result, IDNR-FWS keeps a record of everything that they apply or that is applied by their contractor.

## 4. Forest canopy

OISC contacted the IDNR State Entomologist and determined that currently the only type of forest canopy pesticide application work being done in Indiana is Gypsy Moth control and occasionally some Forest Tent Caterpillar control work. These applications are made by air. Regardless of the pest, the work is contracted by IDNR to certified and licensed applicators (businesses). IDNR dictates in those contracts the specific pesticide to be used, the application rate, the application timing and the application location. IDNR also keeps as part of their application records the actual geo-located applicator flight patterns including spray nozzle on and off records. These records are a matter of public record.



## **Special requirements**

This permit requires compliance with the Endangered Species Act and Indiana law concerning non-game endangered and threatened species at:

- (1) The Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.).
- (2) [IC 14-22-34](#) for non-game endangered and threatened species.

This permit also makes special provisions for use of pesticides in declared pest emergency conditions under 40 CFR 166.

Requirements for document signatures are found in [327 IAC 5-2-22](#).

## **ADMINISTRATIVE REQUIREMENTS**

### **Procedures for reaching a final decision on the general permit**

This permit is based on the 2011 Indiana PGP and the draft 2016 EPA PGP. U.S. EPA is not proposing any changes to its 2011 PGP for its renewal of the federal PGP. As a delegated state, Indiana is required to develop a permit that is not less stringent than permits issued under the federal NPDES program. Conversely, IDEM is strongly discouraged from developing permit conditions that are substantively more stringent than the federal program. Therefore Indiana is not proposing any changes to its PGP, other than updating references and regulatory citations that have changed since 2011.

### **Public comment period beginning and ending dates**

As provided in 40 CFR 124.10, this general permit shall be noticed for public comment. After the end of the 30-day comment period, the permit will be issued as a final administrative general permit, with any modifications requested by U.S. EPA Region 5 or resulting from public comments received during the public comment period.

### **Procedures for requesting a hearing**

In addition to the requirements of 40 CFR 124.12, procedures for requesting a hearing are found in [327 IAC 5-3](#).

### **Other procedures for public participation**

IDEM complies with the public participation requirements of 40 CFR 122 and 40 CFR 124. Other procedures for public participation are found in [327 IAC 5-3](#).

## **CONTACT FOR MORE INFORMATION**

Please direct comments and questions about this fact sheet or the general permit to Catherine Hess at 317-232-8704 or [chess@idem.IN.gov](mailto:chess@idem.IN.gov).